

IN THE CLAIMS:

Please amend claims as follows:

1. (Currently Amended) A system, comprising:

a plurality of access points distributed through a plurality of nodes of said system, wherein components of each access point of said plurality of the access points is divided into two or more groups ~~greeps~~ located in corresponding two or more nodes of said plurality of the nodes, said two or more nodes being remotely located relative to each other, such that each of said two or more nodes is configured to establish a remote communication link with one or more of said two or more nodes,

wherein nodes of said plurality of the nodes are organized in a hierarchical order, such that a number of highest layer components of said plurality of the access points comprised in said plurality of the nodes is smaller than a number of lowest layer components of said plurality of the access points comprised in said plurality of the nodes in order to reduce a total number of components needed to provide said plurality of the access points of a communication network of said system.

Claims 2-25 are cancelled

26. (Previously Presented) The system of claim 1, wherein each access point of said plurality of the access points comprises

corresponding two or more nodes of said plurality of the nodes, said corresponding two or more nodes are:

an access dot, comprising a radio frequency layer component; and

an access dot controller, comprising an access point software layer component.

27. (Previously Presented) The system of claim 1, wherein said remote communication link is a wireless communication link, a short-range wireless communication link, a BLUETOOTH link, or a wired link.

28. (Currently Amended) The system of claim 1, wherein each of said two or more groups ~~greeps~~ located in said corresponding two or more nodes of said plurality of the nodes comprises a remote link driver configured to provide said remote communication link by extending a bus or using a protocol stack tunnel between corresponding components of said each of said two or more groups ~~greeps~~.

29. (Currently Amended) The system of claim 1, wherein each access point of said plurality of the access points comprises corresponding two or more nodes of said plurality of the nodes, said corresponding two or more nodes are:

an access dot, comprising a radio frequency layer component; and

an access dot controller, comprising an access point software layer component,

wherein a physical layer component ~~layer-component~~ is comprised in said access dot ~~layer~~ or in said access dot controller.

30. (Currently Amended) The system of claim 1, wherein each access point of said plurality of the access points comprises corresponding two or more nodes of said plurality of the nodes, said corresponding two or more nodes are:

an access dot, comprising a radio frequency layer component; and

an access dot controller, comprising an access point software layer component,

wherein an access point software layer component is comprised in said access dot ~~layer~~ or in said access dot controller.

31. (Previously Presented) The system of claim 1, further comprising one or more system controllers, wherein each system controller of said one or more system controllers is configured to control one or more access points of said plurality of the access points distributed through said plurality of the nodes.

32. (Previously Presented) The system of claim 31, wherein at least one of said one or more system controllers is logically centralized and implemented as a physical switch.

33. (Previously Presented) The system of claim 31, wherein at least one of said one or more system controllers is logically centralized and implemented using a physically distributed hosting function incorporated into one or more access points of said plurality of the access points distributed through said plurality of the nodes.

34. (Previously Presented) The system of claim 1, wherein each access point of said plurality of the access points comprises

corresponding two or more nodes of said plurality of the nodes, said corresponding two or more nodes are:

- an access dot, comprising a radio frequency layer component;

- an access dot controller; and

- an access dot system controller, comprising access point software layer component.

35. (Currently Amended) The system of claim 1, wherein each access point of said plurality of said access points comprises corresponding two or more nodes of said plurality of the nodes, said corresponding two or more nodes are:

- an access dot, comprising a radio frequency layer component;

- an access dot controller; and

- an access dot system controller, comprising access point software layer component,

- wherein a physical layer component is comprised in said access dot ~~layer~~ or in said access dot controller, and

- wherein an access point software component is comprised in said access dot ~~layer~~ or in said access dot controller.

36. (Currently Amended) A method, comprising:

- receiving or transmitting a communication signal by any access point of a plurality of the access points of a communication network of a system for further processing, said plurality of the access points being distributed through a plurality of nodes of said system,

- wherein components of each of said plurality of the access points are divided into two or more groups ~~groups~~ located in corresponding two or more nodes of said plurality of the nodes, said two or more nodes being remotely located relative to each

other, such that each of said two or more nodes is configured to establish a remote communication link with one or more of said two or more nodes, and

wherein nodes of said plurality of the nodes are organized in a hierarchical order, such that a number of highest layer components of said plurality of the access points comprised in said plurality of the nodes is smaller than a number of lowest layer components of said plurality of the access points comprised in said plurality of the nodes in order to reduce a total number of components needed to provide said plurality of the access points of the communication network of said system.

37. (Previously Presented) The method of claim 36, wherein each access point of said plurality of the access points comprises corresponding two or more nodes of said plurality of the nodes, said corresponding two or more nodes are:

an access dot, comprising a radio frequency layer component; and

an access dot controller, comprising an access point software layer component.

~~37~~ 38. (Currently Amended) The method of claim 36, wherein said remote communication link is a wireless communication link, a short-range wireless communication link, a BLUETOOTH link, or a wired link.

~~38~~ 39. (Currently Amended) The method of claim 36, wherein each of said two or more ~~groups~~ ~~greeps~~, located in said corresponding two or more nodes of said plurality of the nodes, comprises a remote link driver configured to provide said remote communication link by extending a bus or using a protocol stack

tunnel between corresponding components of said each of said two or more groups ~~greeps~~.

39 40. (Currently Amended) The method of claim 36, wherein each access point of said plurality of the access points comprises corresponding two or more nodes of said plurality of the nodes, said corresponding two or more nodes are:

an access dot, comprising a radio frequency layer component; and

an access dot controller, comprising an access point software layer component,

wherein a physical layer component layer component is comprised in said access dot ~~layer~~ or in said access dot controller.

40 41. (Currently Amended) The method of claim 36, wherein each access point of said plurality of the access points comprises corresponding two or more nodes of said plurality of the nodes, said corresponding two or more nodes are:

an access dot, comprising a radio frequency layer component; and

an access dot controller, comprising and access point software layer component,

wherein an access point software layer component is comprised in said access dot ~~layer~~ or in said access dot controller.

41 42. (Currently Amended) The method of claim 36, wherein each access point of said plurality of the access points comprises corresponding two or more nodes of said plurality of the nodes, said corresponding two or more nodes are:

an access dot, comprising a radio frequency layer component;  
an access dot controller; and  
an access dot system controller, comprising access point software layer component.

42 43. (Currently Amended) The method of claim 36, wherein each access point of said plurality of the access points comprises corresponding two or more nodes of said plurality of the nodes, said corresponding two or more nodes are:

an access dot, comprising a radio frequency layer component;  
an access dot controller; and  
an access dot system controller, comprising access point software layer component,  
wherein a physical layer component is comprised in said access dot ~~layer~~ or in said access dot controller, and  
wherein an access point software component is comprised in said access dot ~~layer~~ or in said access dot controller.